

EPA LISTENING SESSION WITH INDUSTRY REGARDING EPA'S BEST PROFESSIONAL JUDGMENT (BPJ) EVALUATION OF ECONOMICALLY ACHIEVABLE WATER POLLUTION CONTROL TECHNOLOGY (Denver: 12/06/01)

[This is not a verbatim transcript. Rather it is a recording of major points of discussion. Every effort is made to accurately reflect the discussion. In some cases comments are condensed or paraphrased.]

[Other's in attendance were the Department of Energy, Department of Interior/ Bureau of Land Management and the Wyoming Department of Environmental Quality.]

- The Environmental Protection Agency (EPA) reported that the draft report would be out January in 2002, with the final expected out in March 2002. [These dates will not be met based on EPA's agreement to incorporate additional information . . . see below.]
- Mr. Tuber explained EPA's position regarding the necessity of using the BPJ process because of the non-applicability of the effluent limitation guideline (ELG) for conventional onshore oil and gas.
- Mr. Reed explained the approach and reported the status of the BPJ evaluation, and economically achievable water pollution control technologies.
- Industry Question: Current ELG allows for discharge, so what is the basis for including reverse osmosis (RO) in the evaluation?
- Concerns about zero discharge were presented by members of industry and addressed by Steve Tuber. Industry is concerned whether or not it is economically feasible. EPA identified that it was open to the possibility that it is not.
- EPA identified that the existing ELG was an option under the BPJ evaluation, not necessarily a baseline. The beneficial use of discharge water is being considered.
- Industry was interested in the preliminary findings, specifically, the economics of injection and RO. EPA responded that the economic models have not yet been run, but once they are run with the various input parameters, EPA will post on the website.
- A concern was raised regarding the regulatory complexity and how the BPJ evaluation will consider these? (Recharge/recovery/volume of water) EPA will look at other environmental effects and regulatory constraints and consider these

impacts along with the economics of the treatment options. EPA hasn't figured out how much weight should be given to this other information yet.

- Concern was expressed regarding regulatory constraints in disposal by injection in Class II and the need for an aquifer exemption, versus Class V aquifer restoration. Concern was also expressed in the ability of physical aquifer properties and the cost because of such injections, and the tie into regulatory constraints discussed above, specifically, permit timing issues and monitoring issues for the preferred injection class. An example was given for northwestern Colorado. Also some concern existed for collateral coal issues.
- A question was asked whether or not the "Big Picture" of the evaluation was truly captured in the BPJ evaluation?
- EPA explained that all states in Region 8 have primacy for Class II ; that EPA has primacy for Indian Country for Classes II and V, and for Montana, Colorado, and South Dakota for Class V.
- Concern was raised about the economics of oil and gas, support water treatment and water resources.
- Collateral issues are also involved (in addition to economic and environmental issues).
- Water in shallow aquifers is viewed as useful. Reinjection into deeper aquifers is viewed as uneconomical and wasteful of the resource. The State of Wyoming and industry want to see it reused.
- A general question was asked regarding whether or not the quantification of water loss in some standard (Cost of acre-ft.) has been calculated or assessed.
- A concern was voiced regarding the comparison of one basin to another, recognizing that different basins have different volumes and quality of CBM related waters. Another concern was raised regarding the application of a model, which could be applied across-the-board, which would not address the identified variability.
- A concern was raised that the ultimate feasibility and resultant reuse/disposal of CBM water be consistent with basin variability and well economics.
- A question was asked regarding the applicability of the BPJ evaluation with regard to data gathering and how other potential development and/or existing development areas would utilize the results of the BPJ evaluation. A concern was stated that analysis of the data from one geographic area would be utilized in a different geographic area. The commenter stated that data from one geographic area may not be applicable to another geographic area.

- A question was raised regarding the guidance (i.e. the BPJ evaluation), which is being prepared. EPA responded that the Region 8 guidance being developed is first in the nation and that other regions may use this as CBM issues arise. Some concern was voiced regarding the establishment of virtual national effluent guideline, and that water should not be managed the same across the board.
- EPA identified that water management issues will be taken into account in the BPJ evaluation.
- A concern was raised that the BPJ evaluation conclusions would restrict innovative utilization of water and that local land use (agricultural use/reuse) will not have flexibility built in. EPA responded that discharge limits will be set in the permit. These did not dictate treatment technology, just the limits for pollutants of concern.
- A question was raised regarding why EPA was focusing on RO technology, whether it is the EPA preferred treatment option, and that other treatment options should be reviewed. EPA responded that RO is used in other treatment areas, and it is used in some limited cases of oil and gas production in tandem with pre-treatment prior to RO. An additional concern focused on the fact that it is the highest treatment cost alternative, and that could affect the cost analysis.
- Concerns were expressed that EPA had not checked with Industry for BAT and that a disconnect between Industry and EPA has occurred regarding BAT for these types of waters. EPA responded that two other alternatives (current “best management practices” for erosion, iron and beneficial reuse, and “no discharge”) are also being evaluated to ensure a range of technologies and costs, including whether a discharge will or will not occur. EPA stated that it is interested in other possible BAT technology (not currently considered in the BPJ evaluation) and that the BPJ evaluation is not limited to RO. However, that is the only technology we could evaluate because of the lack of information regarding other treatment alternatives. EPA requested information on other possible treatment technologies.
- Industry identified that cost considerations are very important in BAT.
- It was identified that environmental impacts (e.g., stream erosion, roads, power supply installation, etc.) from alternative control technologies to surface discharges were not included in the current scope of the BPJ evaluation that should have been included. EPA responded that it plans to identify all factors for each alternative in the BPJ evaluation.
- There was a comment regarding the net environmental benefits of CBM water discharges (both injection and surface release) and a question on how this will be incorporated in the BPJ evaluation. EPA responded that this will be considered and that it should be recognized in the document that impacts the analysis. An

additional commenter stated that all environmental benefits should be considered, not just the water quality issue.

- It was identified that a certain amount of mistrust of EPA by industry exists and of the BPJ evaluation, its conclusions and application. Would the BPJ evaluation ultimately allow operators to continue operations, or would it minimize or discontinue operations? Would it hinder or assist in production? Would it cost industry dearly?
- Beneficial use was identified as an important issue and that stakeholders want access to water (i.e. irrigation potential). It was stated that if this isn't acknowledged, that would be a mistake. EPA agreed that this will be included in the BPJ evaluation.
- A concern was given regarding consideration/ effect/ impact that the BPJ evaluation will have on small business and inclusion of considerations under the Regulatory Flexibility Act. (Threshold of \$100 million dollars total yearly impact). This information needs to be included in the BPJ evaluation. EPA responded that additional data needs to be collected.
- Concerns were voiced that there wasn't sufficient time provided and that some companies or groups were not able to participate during the comment period. It was suggested that supplemental data be gathered, as the current data may not be reflective of all interests. It was suggested that an additional open period for comment should be given from 2 – 8 weeks in length to gather additional input and comment. EPA asked that additional information be provided as soon as possible. [EPA has since sent an email to participants requesting information by January 15, 2002, or as soon as possible thereafter by individual arrangement with Mr. Reed.]
- Concern was voiced that the data will not be adequate, and that the timeframes for data submittal was too short.
- Concern was voiced regarding the appeal process and timeframes associated with that appeal process. An additional concern focused on the ability to appeal the BPJ guidance. EPA stated that once the economic models are run, a draft will be shared (probably on the website) before being formalized. There will also be an additional meeting to take comments on the draft.
- A concern was voiced that some confusion exists regarding the difference between guidance, permits and rule. EPA identified that guidance is not mandatory, therefore it generally is not enforceable. Guidance provides alternatives, is not appealable, and is not a final agency action. Guidance is used in making permit decisions. Permits are issued pursuant to regulations and are therefore enforceable. Permits can be appealed. Rules are regulations with

specific procedures/constraints and are enforceable. Permit writers will use the BPJ evaluation as guidance.

- A question was raised regarding the effect of guidance -- whether or not guidance will be used to set permit limits; also, which agency would make permit decisions. EPA stated that guidance doesn't create mandatory permit limits, but provides some alternatives to permit writers for potential permit limits. Primacy agencies for states that are authorized to implement the NPDES program (e.g., WDEQ and MDEQ) issue permits for discharges to areas under their jurisdiction. [EPA reviews these permits for compliance with Clean Water Act requirements.] EPA issues permits for Indian Country.
- A concern was raised that guidance from the agency is usually treated as a rule.
- Members of industry identified that they would like to avoid any appeal processes. EPA responded that Industry has the legal right to appeal permits.
- A point was made regarding the need and necessity of a national effluent limitation guideline (ELG) for this type of discharge and that this situation is not appropriate for a BPJ guidance. EPA responded that it has an obligation to go through the BPJ process in the absence of an applicable ELG, and we are trying to be responsive to various interests.
- Given the discussion above, EPA again asked industry to submit any applicable data to strengthen the BPJ evaluation document.
- Concern was voiced regarding the appearance that EPA is not participating on the Wyoming EIS. EPA responded that it is participating on both the Wyoming and Montana EISs and coordinating with the responsible BLM state offices. The Wyoming EIS needs to address the number of injection wells, the number of producing wells and the impacts that should be quantified.
- EPA identified that as assumptions used in the BPJ evaluation and are modified, they will be posted on the website.
- A question was raised why a BPJ evaluation is being done at all.
- A Wyoming Department of Environmental Quality representative asked about the use of the BPJ guidance document and offered that it was not needed because a predominant portion of the activity would be permitted by the states. Because Wyoming had addressed this issue adequately, there would be limited use of the guidance for a few tribes. Reconsideration was advised.
- EPA asked that if we continue dialogue and openness, can industry buy into this concept, the process, and the resultant document

- Industry responded that it is always the industry goal to work with the Agency and that if this results in a roadmap for a permit writer, then “yes.” However, some concern exists on whether or not a “one answer” document is realistic. The timeframes associated with putting this document together and the intervention necessary by industry to get input into the process were some of the basis of mistrust. EPA’s expertise in economic study was questioned. It was offered that Department of Energy (DOE) should be involved for their expertise. An example was offered where a range of potential costs was identified, and the lowest cost was always used in the analysis. An example of infrastructure costs was offered specifically. It was suggested that the BPJ evaluation provide value for industry to encourage this process legislatively/legally. It was asked if this process stopped, whether operations would stop and whether permits would be issued. Industry also identified that the value to the development of effluent guidelines would be based on sound science and that all data should be considered. A final industry clarification was that EPA is trying to do this too fast and this may be problematic and it is probably better and would be more successful in process and implementation if it was stated how the BPJ study is going to be used and who will use it. EPA committed to providing a framework for data submittal; and that the evaluation design allowed for differentiation of physical characteristics and their effects for different portions of the Powder River Basin.
- EPA identified that a meeting with DOE & BLM will occur the next week in DC to discuss the BPJ evaluation technical inputs (e.g., additional data needs, economic model assumptions).
- EPA also identified that the regional CBM coordinator will be selected very soon. With this selection, a central point of communication will exist which will make coordination and integration much easier.
- Industry identified that they would supply injection data to EPA for their evaluation.
- Industry provided written comments from API on the BPJ evaluation to EPA.
- There was a comment that EPA should minimize duplication in the BPJ evaluation process. Williams Pipeline Co. will solicit industry and chair a focus group to discuss the BPJ evaluation. Industry suggested that next meeting should be more open and should include more interested parties. EPA should continue to expand the invitee list, keeping everybody informed. EPA should especially consult with stakeholders wanting access to the water. EPA needs to speak with landowners who are more diversified in their opinions. Irrigation potential exists for CBM water with application of some soil amendments and should be included in the BPJ evaluation study.

- Industry recognized this meeting as very positive and encourages continued dialogue. Industry also encourages a federal family consensus and the integration of states opinions and authorities.